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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,273	02/20/2004	Hsiao-Wu Chen	ACMP0051USA	2272

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EXAMINER

CASCA, FRED A

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/708,273

Applicant(s)

CHEN ET AL.

Examiner

Fred A. Casca

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-8 is/are rejected.
- 7) ☒ Claim(s) 2 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment filed on August 17, 2006.

Claims 1-8 are still pending in the present application. **This Action is made FINAL.**

Claim Rejections -35 U.S.C. 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the word "substantially" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. The phrase "substantially parallel" satisfies any degree of parallelism. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (U.S. Patent No. 6,068,519) in view of Wu (U.S. Pub. No. 2003/0073469 A1) and further in

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view of Snyder et al (U.S. Pub. No. 2004/0204185 A1), and still further in view of Ryan (US 7123735 B2).

Referring to claim 1, Lok discloses a mobile phone comprising a circuit board (col. 1, lines 5-55, "circuit board", "mobile phone"), and a connector comprising an insulative body (col. 1, lines 5-55, "battery connector comprises an elongate insulative base").

Lok does not disclose insulative body **having a first engaging sink for accommodating a microphone, and a second engaging sink for accommodating a coin battery, both being disposed on opposite sides of the insulative body; a first conductive terminal, a second conductive terminal, and a third conductive terminal, each for connecting the microphone and the circuit board; and a fourth conductive terminal and a fifth conductive terminal, both for connecting the coin battery and the circuit board.**

Wu discloses an insulative body having a first engaging sink for accommodating a microphone, and a second engaging sink located opposite the first engaging sink for accommodating a coin battery, wherein the coin batter is flat, both being disposed on opposite sides of the insulative body (figure 2, and paragraphs 18-20, "signal connector 310 is mounted on the substrate board 300", note that figure discloses the battery and the microphone on opposite sides of each other. Further, the battery 600 is with the 220 and mic 400 is placed with the 210, where 210 and 220 are indeed on opposite sides from each other. Further note that the microphone 400 is one side of the connector and the battery is on the other side of the connector. Also note that the battery 600 of figure 2 is formed as a coin battery. And furthermore note that the coin battery is flat as depicted in

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figure 2), and are substantially parallel to each other and the insulative body (figure 2, note the battery and the microphone are substantially parallel to each other where the word “substantially” satisfies any degree of parallelism. In other words substantially indefinite and doesn’t specifically show a degree of parallelism).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok by incorporating the teachings of Wu and consequently providing the insulative body to have a first engaging sink for accommodating a microphone, and a second engaging sink for accommodating a coin battery, both being disposed on opposite sides of the insulative body, motivation being to save space on the circuit board and provide space for function chip for the mobile phone.

The combination of Lok and Wu does not specifically disclose **a first conductive terminal, a second conductive terminal, and a third conductive terminal, each for connecting the microphone and the circuit board; and a fourth conductive terminal and a fifth conductive terminal, both for connecting the coin battery and the circuit board.**

Snyder disclose a first conductive terminal, a second conductive terminal, and a third conductive terminal, each for connecting the microphone and the circuit board; and a fourth conductive terminal and a fifth conductive terminal, both for connecting the coin battery and the circuit board (figure 5, note that there are three conductive terminal are reserved for microphone (audio circuit) and two conductive terminals for battery).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu by incorporating the teachings of Snyder and consequently providing a first conductive terminal, a second conductive

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terminal, and a third conductive terminal, each for connecting the microphone and the circuit board; and a fourth conductive terminal and a fifth conductive terminal, both for connecting the coin battery and the circuit board, motivation being to provide the battery and microphone to have proper connections so that power and audio signals are manipulated properly.

The combination of Lok/Wu/Snyder does not disclose the microphone is flat.

Ryan discloses that a microphone is flat (col. 7, lines 16-34, "microphone maybe flat).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of Ryan by providing a flat microphone as disclosed by Ryan because a flat microphone takes lesser space and thus providing a more compact wireless device.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (U.S. Patent No. 6,068,519) in view of Wu (U.S. Pub. No. 2003/0073469 A1) and further in view of Snyder et al (U.S. Pub. No. 2004/0204185 A1), and further in view of Ryan (US 7123735 B2), and still further in view of Patel et al (US Patent No. 5,823,820).

Referring to claim 2, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not specifically disclose the first engaging sink comprises at least a side wall having two fixing sinks for fixing the first conductive terminal and the second conductive terminal.

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Patel discloses the first engaging sink comprises at least a side wall having two fixing sinks for fixing the first conductive terminal and the second conductive terminal (col. 2, line 60-col. 3, line 5, "second opening 40 in major side wall 28 into cavity 24 for engaging center positive terminal").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of Patel, and providing the first engaging sink to comprise at least a side wall having two fixing sinks for fixing the first conductive terminal and the second conductive terminal, motivation being for the purpose of allowing the terminals to get to the PCB.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (U.S. Patent No. 6,068,519) in view of Wu (U.S. Pub. No. 2003/0073469 A1) and further in view of Snyder et al (U.S. Pub. No. 2004/0204185 A1), and further in view of Ryan (US 7123735 B2), and still further in view of Shimazaki et al (US Pub. No. 2002/0123375 A1).

Referring to claim 3, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not specifically disclose the second engaging sink comprises a frame having two hollows corresponding to the location of the two fixing sinks.

Shimazaki disclose the second engaging sink comprises a frame having two hollows corresponding to the location of the two fixing sinks (figures 1-3, and paragraphs 5, 11, 15, 20 and 29).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of Shimazaki and providing the second engaging sink to comprise a frame having two hollows corresponding to the location of the two fixing sinks, motivation being for the efficient installation of the battery.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (U.S. Patent No. 6,068,519) in view of Wu (U.S. Pub. No. 2003/0073469 A1) and further in view of Snyder et al (U.S. Pub. No. 2004/0204185 A1) and further in view of Ryan (US 7123735 B2) and still further in view of Ward et al (US Patent No. 6,183,299 B1).

Referring to claim 5, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not specifically disclose the first engaging sink of the insulative body has a first trench with one edge penetrating the insulative body for accommodating the fourth conductive terminal, with the other edge not penetrating the insulative body for accommodating the third conductive terminal, and a second trench penetrating the insulative body for accommodating the fifth conductive terminal.

Ward discloses insulative body has a first trench with one edge penetrating the insulative body for accommodating the fourth conductive terminal (figure 13 and col. 7, lines 35-56).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings

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of Ward and consequently providing the first engaging sink of the insulative body of Lok/Wu/Snyder to have a first trench with one edge penetrating the insulative body for accommodating the fourth conductive terminal, with the other edge not penetrating the insulative body for accommodating the third conductive terminal, and a second trench penetrating the insulative body for accommodating the fifth conductive terminal, motivation being to provide an efficient connections to the PCB.

9.---- Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (U.S. Patent No. 6,068,519) in view of Wu (U.S. Pub. No. 2003/0073469 A1) and further in view of Snyder et al (U.S. Pub. No. 2004/0204185 A1) and further in view of Ryan (US 7123735 B2) and further in view of well known prior art (MPEP 2144.03)

----- Referring to claim 6, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not disclose the third conductive terminal comprises a leading portion for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board for connecting with the microphone on the side of the first engaging sink.

The examiner takes official notice of the fact that conductive terminals having a leading portion for connecting to the circuit board is well known in the art.

It would have been obvious to one the ordinary skill in the art at the time invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of prior art and consequently providing a leading portion of the third conductive terminal

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for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board, for connecting with the microphone on the side of the first engaging sink, so that it provides a connection to the circuit board and making a connection on the other side of the engaging sink.

Referring to claim 7, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not specifically disclose the fourth conductive terminal comprises a leading portion for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board, for connecting with the coin battery on the side of the second engaging sink.

The examiner takes official notice of the fact that conductive terminals having a leading portion for connecting to the circuit board is well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of prior art and consequently providing a leading portion of the fourth conductive terminal to comprise a leading portion for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board, for connecting with the coin battery on the side of the second engaging sink, so that the coin battery is connected efficiently.

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Referring to claim 8, the combination of Lok/Wu/Snyder disclose the mobile phone of claim 1.

The combination of Lok/Wu/Snyder does not specifically disclose the fifth conductive terminal comprises a leading portion for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board, for connecting with the coin battery on the side of the second engaging sink.

The examiner takes official notice of the fact that conductive terminals having a leading portion for connecting to the circuit board is well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the mobile phone of Lok/Wu/Snyder by incorporating the teachings of prior art and consequently providing a leading portion of the fifth conductive terminal to comprise a leading portion for connecting with the circuit board on the side of the first engaging sink, and a contact portion, bent out of the leading portion toward the opposite side of the circuit board, for connecting with the coin battery on the side of the second engaging sink so that the coin battery is connected efficiently.

Allowable Subject Matter

10. Claims 2 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

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11. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached at (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER